



U.S. Department of Transportation
Federal Motor Carrier Safety Administration

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Trends in Commercial Motor Vehicle (CMV) Crashes

2019 Transportation Research Board 98th Annual Meeting
Federal Motor Carrier Safety Administration
Analysis, Research, and Technology Sessions
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OUR MISSION

FISCAL YEARS 2015 - 2018

FEDERAL MOTOR CARRIER SAFETY ADMINISTRATION

STRATEGIC PLAN



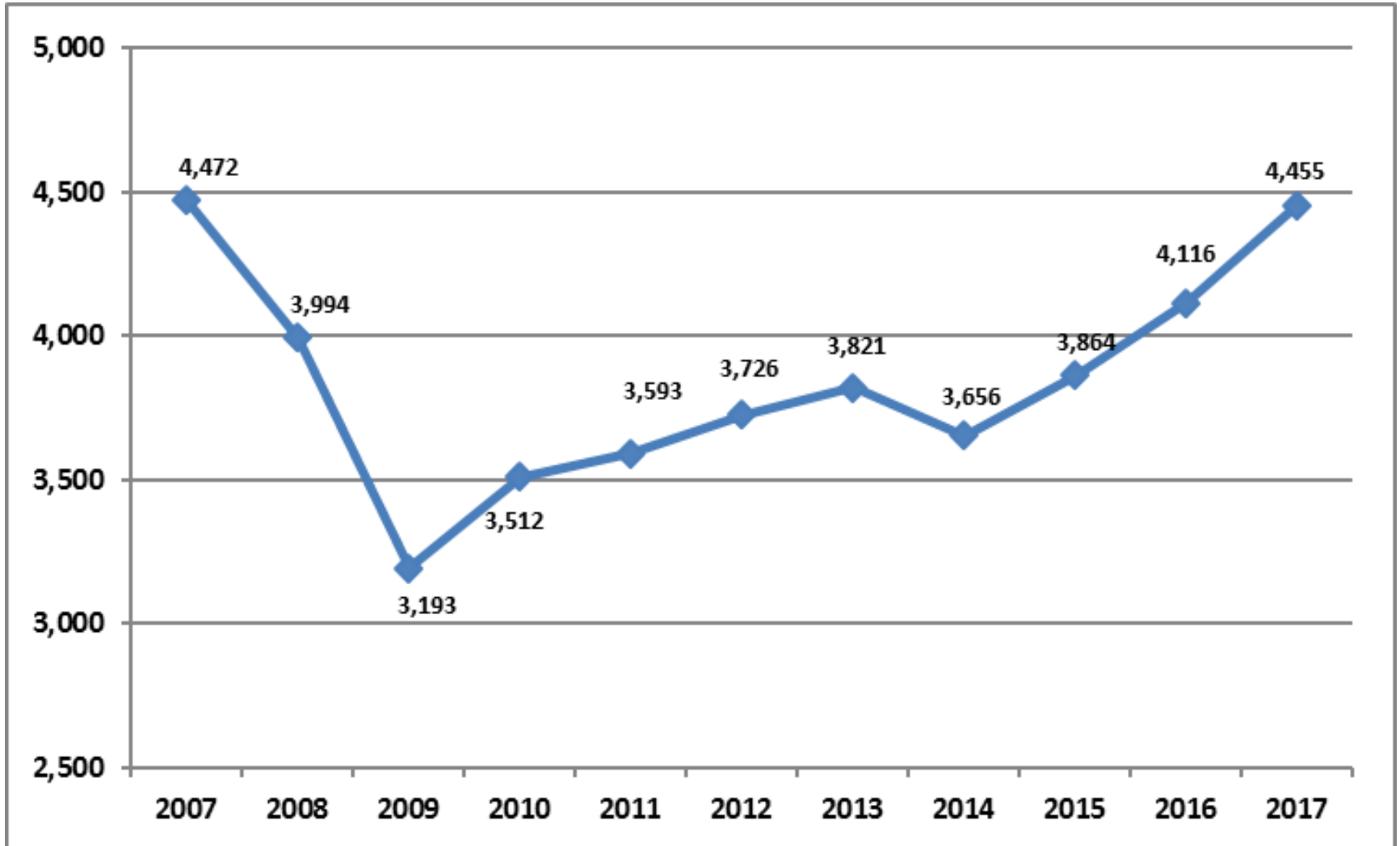
Placing safety as our highest priority:

Reduce crashes, injuries, and fatalities involving CMV transportation through *education*, *innovation*, *regulation*, *enforcement*, *financial assistance*, *partnerships*, and *full accountability*.

OVERVIEW: LARGE TRUCK AND BUS FATAL CRASH DATA, 2015-2017

Category	2015	2016	2017	2015-2017 Percent Change
Fatal <u>Crashes</u> Involving Large Trucks and/or Buses	3,864	4,116	4,455	15.3%
Large <u>Trucks and</u> <u>Buses</u> Involved in Fatal Crashes	4,337	4,485	4,889	12.7%
<u>Fatalities</u> in Large Trucks and/or Bus Crashes	4,366	4,629	5,005	14.6%
Large Truck and Bus <u>Occupant Fatalities</u>	714	789	885	23.9%

LARGE TRUCK & BUS FATAL CRASHES, 2007-2017



Source: National Highway Traffic Safety Administration, Fatality Analysis Reporting System (FARS)

BUSES IN FATAL CRASHES BY TYPE OF BUS, 2015-2017

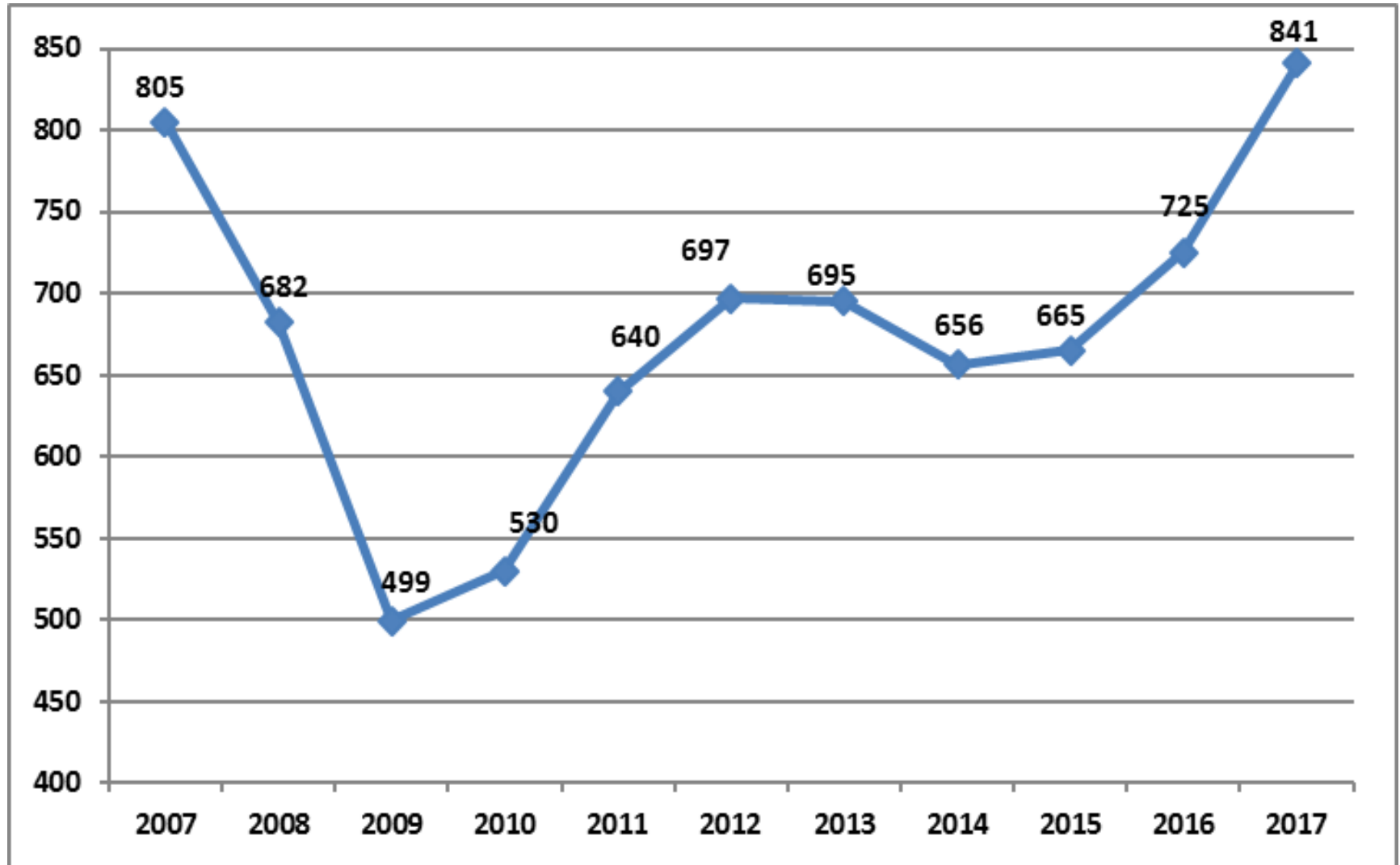
Vehicle	2015	2016	2017	2015-2017 Percent Change
School Bus	99	88	73	-26.3%
Intercity Bus (Motorcoach)	34	17	13	-61.8%
Transit Bus	93	98	95	2.2%
Other/Unknown Bus Type	37	31	51	37.8%
Total	263	234	232	-11.8%

FATALITIES IN SCHOOL BUS CRASHES, 2017

Person Type	Number	Percent
School Bus Driver	5	6.3%
School Bus Passenger	4	5.1%
Passenger Vehicle Occupant (Driver or Passenger)	50	63.3%
Motorcycle Driver	11	13.9%
Other Vehicle Type Driver	1	1.3%
Pedestrian	6	7.6%
Bicyclist / Person on Other Personal Conveyance	2	2.5%
Total	79	100.0%

Source: National Highway Traffic Safety Administration, Fatality Analysis Reporting System (FARS)

LARGE TRUCK OCCUPANT FATALITIES, 2007-2017



Source: National Highway Traffic Safety Administration, Fatality Analysis Reporting System (FARS)

LARGE TRUCK OCCUPANTS IN FATAL CRASHES BY RESTRAINT USE AND INJURY SEVERITY, 2017

Restraint use	No injury number	No injury percent	Unknown injury number	Unknown injury percent	Non-fatal injury number	Non-fatal injury percent	Fatality number	Fatality percent	Total number	Total percent
No	187	5.8%	46	7.8%	158	20.0%	322	38.3%	713	13.1%
Yes	2,833	88.4%	509	86.3%	590	74.8%	378	44.9%	4,310	79.5%
Unknown	183	5.7%	35	5.9%	41	5.2%	141	16.8%	400	7.4%
Total	3,203	100.0%	590	100.0%	789	100.0%	841	100.0%	5,423	100.0%

Source: National Highway Traffic Safety Administration, Fatality Analysis Reporting System (FARS)

TOP DRIVER-RELATED FACTORS FOR LARGE TRUCK & BUS DRIVERS IN FATAL CRASHES, 2017

Driver-Related Factor	Number	Percent
Speeding	303	6.3%
Distraction/inattention (cell phone, lost in thought, eating etc.)	271	5.6%
Failure to Yield Right of Way	233	4.8%
Impairment (fatigue, alcohol, illness, etc.)	187	3.9%
Careless Driving	187	3.9%
Vision Obscured (by Weather, Roadway Design, Vehicles, etc.)	171	3.5%
Failure to Keep in Proper Lane	141	2.9%
Failure to Obey Traffic Sign, Control Devices, Safety Zone Laws	132	2.7%
Following Improperly	99	2.0%
Overcorrecting	79	1.6%

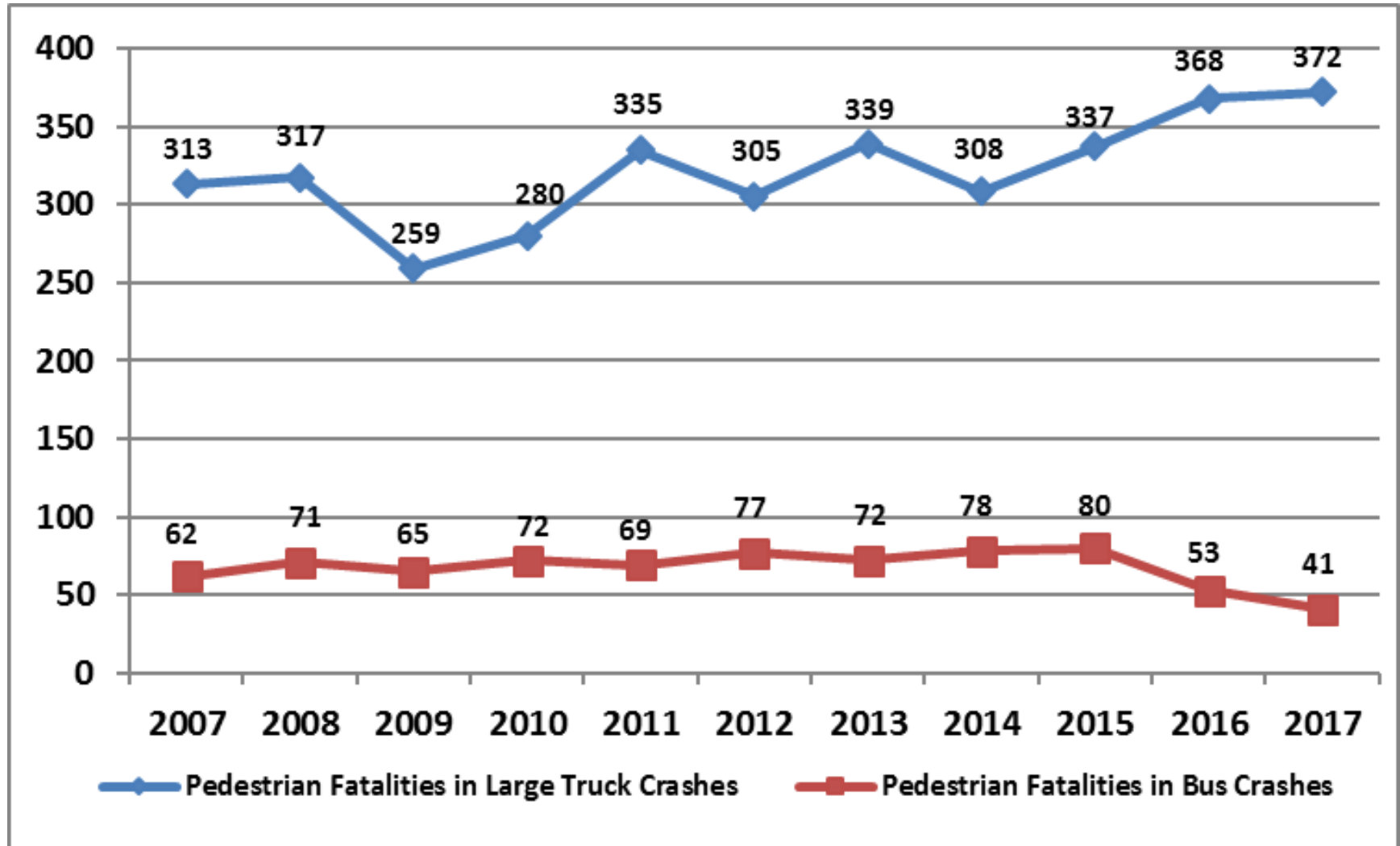
Source: National Highway Traffic Safety Administration, Fatality Analysis Reporting System (FARS)

TOP 10 STATES FOR LARGE TRUCK AND BUS FATALITIES BY STATE, 2015-2017

State	2015	2016	2017	2015-2017 Three-Year Average	Change, 2015- 2017
Texas	599	586	671	618.7	12.0%
California	323	378	383	361.3	18.6%
Florida	244	313	310	289.0	27.0%
Georgia	188	199	225	204.0	19.7%
Pennsylvania	176	184	176	178.7	0.0%
North Carolina	137	162	172	157.0	25.5%
Ohio	167	133	169	156.3	1.2%
Illinois	116	152	159	142.3	37.1%
New York	156	119	137	137.3	-12.2%
Tennessee	123	129	137	129.7	11.4%

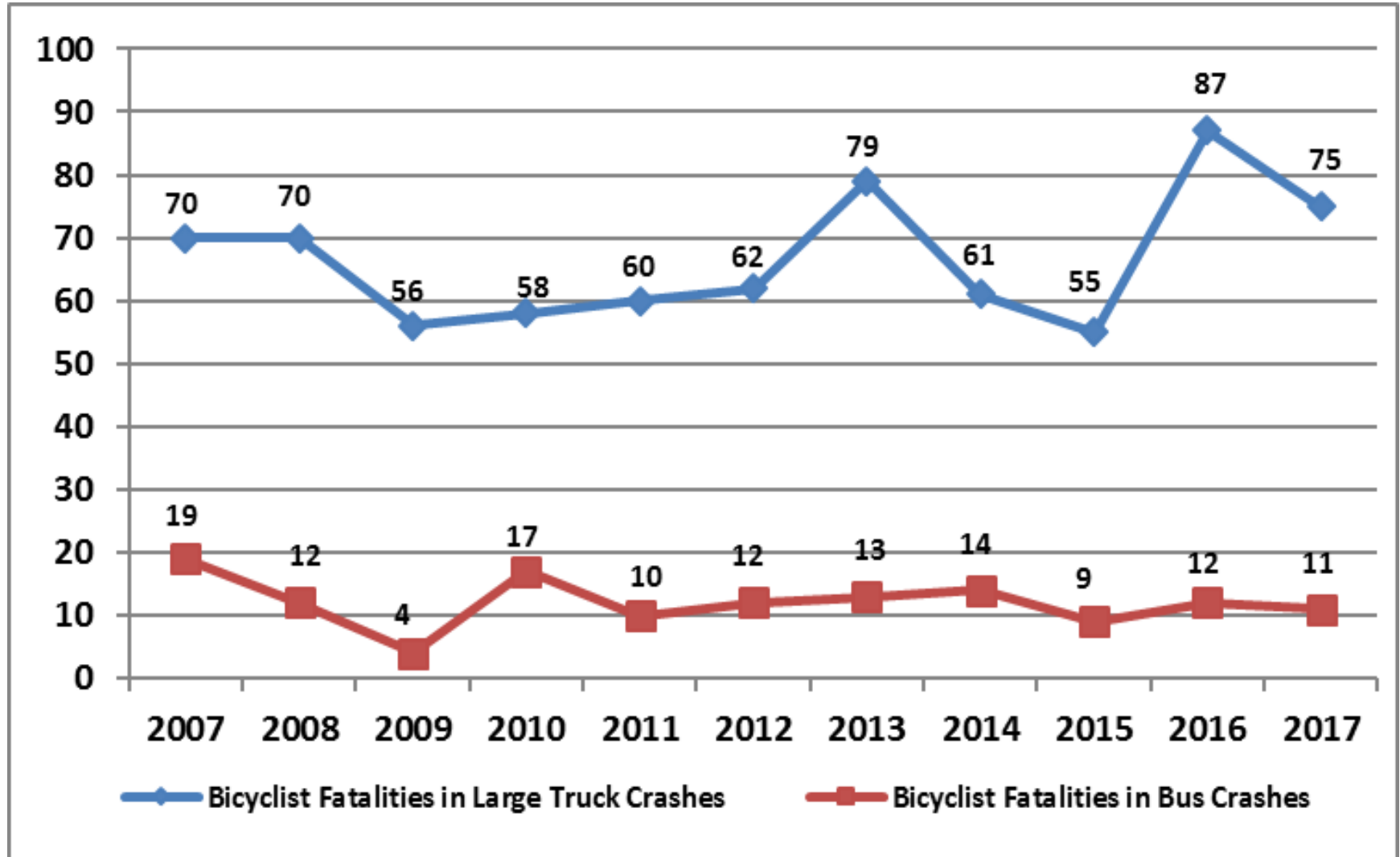
In 2017, these States accounted for about 51% of all large truck and bus fatalities.

PEDESTRIAN FATALITIES IN LARGE TRUCK AND BUS CRASHES, 2007-2017



Source: National Highway Traffic Safety Administration, Fatality Analysis Reporting System (FARS)

BICYCLIST FATALITIES IN LARGE TRUCK AND BUS CRASHES, 2007-2017



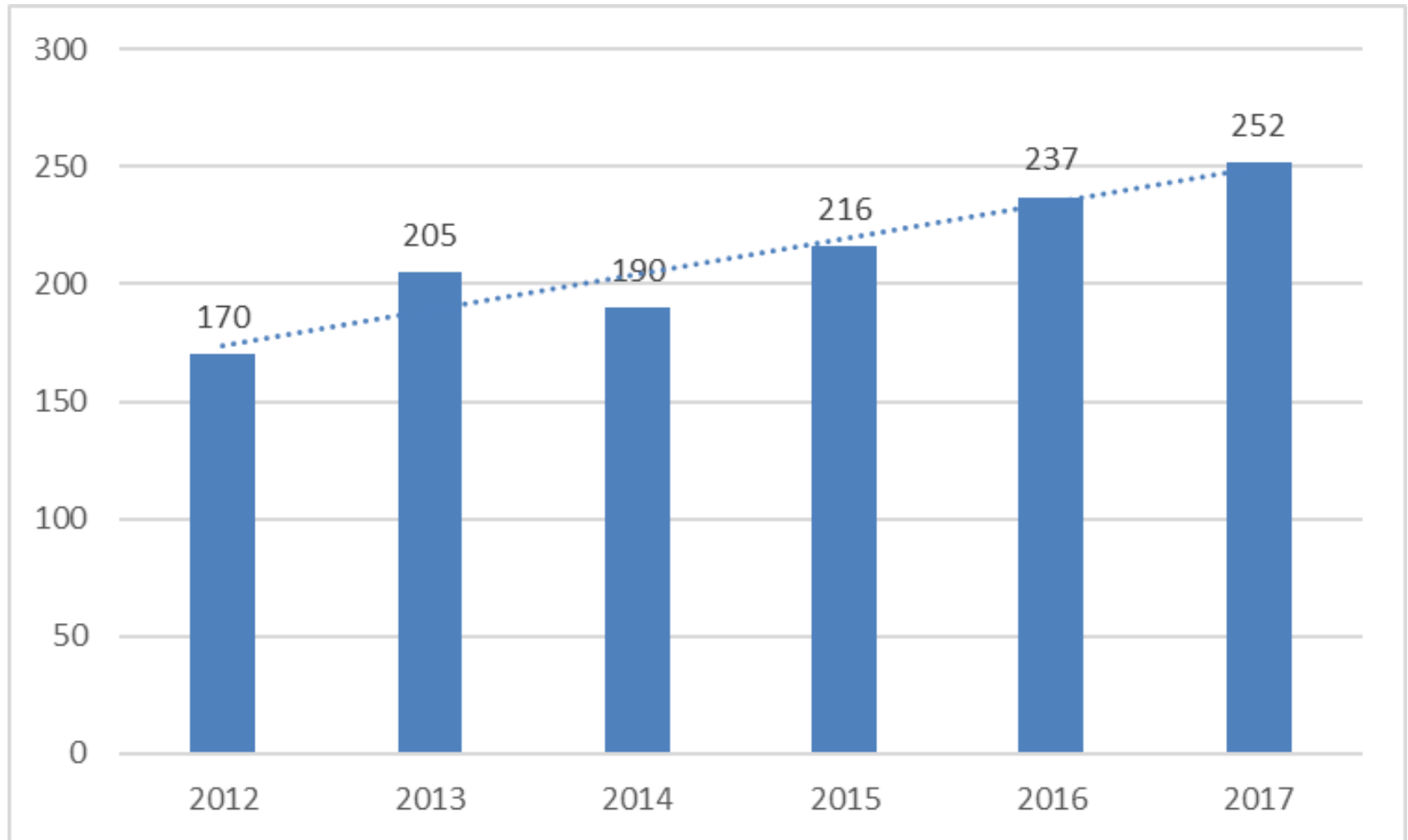
Source: National Highway Traffic Safety Administration, Fatality Analysis Reporting System (FARS)

FATAL CRASHES BY WORK ZONE, 2013-2017

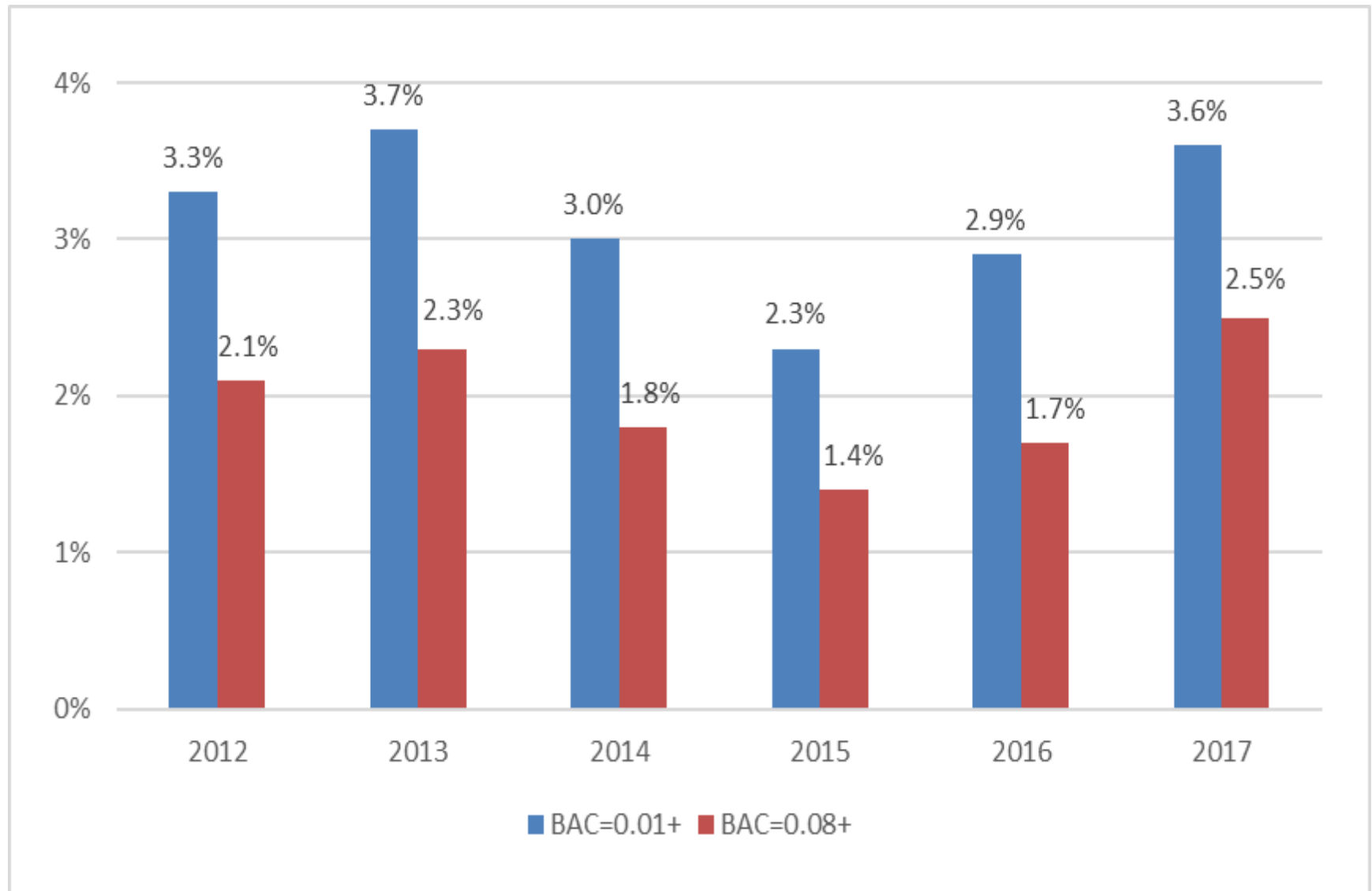
Category	2013	2014	2015	2016	2017
Percentage of Fatal Work-Zone Crashes that Involved at Least One Large Truck	28.2%	30.1%	26.8%	27.2%	30.4%
Percentage of ALL Fatal Crashes that Involved at Least One Large Truck	11.8%	11.4%	11.1%	11.2%	12.4%

Source: National Highway Traffic Safety Administration, Fatality Analysis Reporting System (FARS)

POSITIVE DRUG TESTS FOR LARGE TRUCK DRIVERS IN FATAL CRASHES, 2012-2017



PERCENTAGE OF LARGE TRUCK DRIVERS IN FATAL CRASHES BY BLOOD ALCOHOL CONTENT, 2012-2017

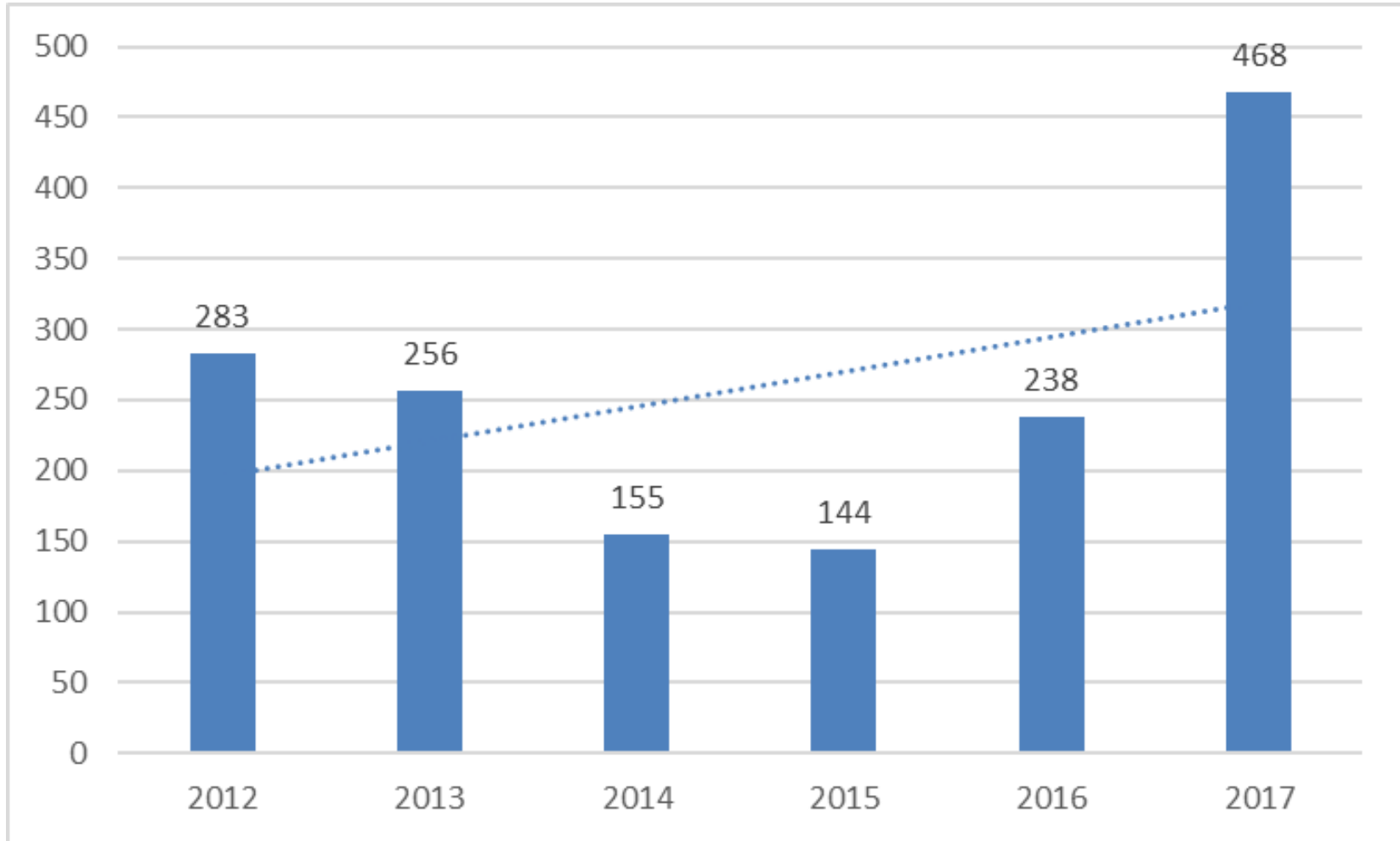


LARGE TRUCKS IN FATAL CRASHES BY TRUCK WEIGHT RATING, 2014 – 2017

Truck Weight Rating	2014		2015		2016		2017	
	Number	Percent	Number	Percent	Number	Percent	Number	Percent
Class 1: < 6,000 lb	0	0.0%	1	*	0	0.0%	0	0.0%
Class 2: 6,001 - 10,000 lb	2	0.1%	5	0.1%	4	0.1%	5	0.1%
Class 3: 10,001 - 14,000 lb	155	4.1%	144	3.5%	238	5.6%	468	10.0%
Class 4: 14,001 - 16,000 lb	70	1.9%	70	1.7%	101	2.4%	97	2.1%
Class 5: 16,001 - 19,500 lb	79	2.1%	85	2.1%	105	2.5%	142	3.0%
Class 6: 19,501 - 26,000 lb	221	5.9%	221	5.4%	258	6.1%	243	5.2%
Class 7: 26,001 - 33,000 lb	235	6.3%	257	6.3%	234	5.5%	271	5.8%
Class 8: > 33,000 lb	2,902	77.4%	3,191	78.3%	3,210	75.5%	3,309	71.1%
Unknown	85	2.3%	100	2.5%	101	2.4%	122	2.6%
Total	3,749	100.0%	4,074	100.0%	4,251	100.0%	4,657	100.0%

Source: National Highway Traffic Safety Administration, Fatality Analysis Reporting System (FARS).

10,001-14,000 LB. LARGE TRUCKS IN FATAL CRASHES, 2012-2017



Source: National Highway Traffic Safety Administration, Fatality Analysis Reporting System (FARS).

10,001-14,000 LB. LARGE TRUCKS IN FATAL CRASHES BY BODY TYPE, 2017

Body Type (10-14k LTs)	2017	Percent
Step van (>10,000 lbs. GVWR)	1	0.21%
Single-unit straight truck or Cab-Chassis (10,000 lbs. < GVWR < or = 19,500 lbs.)	121	25.85%
Single-unit straight truck or Cab-Chassis (19,500 lbs. < GVWR < or = 26,000 lbs.)	11	2.35%
Single-unit straight truck or Cab-Chassis (GVWR > 26,000 lbs.)	3	0.64%
Single-unit straight truck or Cab-Chassis (GVWR unknown)	5	1.07%
Medium/heavy Pickup (>10,000 lbs. GVWR)	326	69.66%
Unknown medium/heavy truck type	1	0.21%
Total	468	100.00%

Source: National Highway Traffic Safety Administration, Fatality Analysis Reporting System (FARS).

AUTOMATED COMMERCIAL MOTOR VEHICLES

- Potential to save lives.
- Support and encourage this kind of technological innovation.

CRASH PREVENTION STRATEGIES

RULEMAKING

- Electronic Logging Devices Final Rule
- Entry-Level Driver Training Final Rule
- Drug and Alcohol Clearinghouse Final Rule

TRAFFIC ENFORCEMENT

- Large CMV Traffic Enforcement Train-the-Trainer Curriculum
- MCSAP grants to allow states to conduct traffic enforcement
- Traffic Enforcement in Conjunction with Inspection

WORK ZONE WARNING TECHNOLOGY

- Making Innovative Deployment Technology (ITD) grant funds available to research, test, and deploy a work zone & incident electronic notification system

CDL

- Working with State Drivers Licensing Agencies to assure suspension of CDL holders

OUR VISION

FEDERAL MOTOR CARRIER SAFETY ADMINISTRATION

STRATEGIC PLAN

Save lives by striving toward a *crash-free* and *fully accountable* CMV transportation life-cycle.

FISCAL YEARS 2015 - 2018

